

REMARKS**Claim Status**

Claims 1-42 are pending in the application. This paper proposes amending claim 15. Claims 1, 19, and 38 are the independent claims of the application.

Art Rejections

The Final Office Action rejected claims 1-16, 19-35, and 38 under 35 U.S.C. §102(e) as being anticipated by Carey, U.S. Patent Number 6,460,174 (“Carey” hereinafter). The Final Office Action further rejected claims 17, 18, 36, and 37 under 35 U.S.C. §103(a) as being unpatentable over Carey in view of Adams *et al.*, U.S. Patent Publication Number 2001/0042147 (“Adams”). It appears that claims 39-42 were rejected under 35 U.S.C. §102(e) as being anticipated by Carey. We respectfully request reconsideration based on the above amendment and the following arguments.

Claims 1, 19, and 38

Each of the independent claims 1, 19, and 38 recites the limitation of “wherein each station has a dedicated track which it can use to send information to other stations.” The Final Office Action cited Carey at column 2, lines 29-30, for teaching of this limitation. We have previously

argued that Carey's explanation of the meaning of "a series of dedicated connections" does not go beyond contrasting the dedicated connections with a "shared connection," such as a bus. This is the sum total of Carey's express teaching of "dedicated connection." We further argued that it is possible that the series of dedicated connections briefly mentioned in Carey at column 2, lines 28-32, may in effect be a crossbar. We have also argued that the independent claims of the application recite "dedicated track" not in the abstract, but in association with each station.

In responding to these arguments, the Final Office Action, at page 8, apparently admits that "Carey does not provide additional details of the 'dedicated connection.'" The Final Office Action then goes on to state that "for the purpose of rejection, and considering the admittedly well-known concept of a dedicated track, this disclosure of Casey is considered adequate to anticipate the claimed dedicated feature." *Id.* For the following reasons we take issue with this argument.

Initially, please note that we have not admitted that the concept of a dedicated track is well-known. We argued merely that the word "dedicated" has a well defined meaning. Based on this meaning, a person skilled in the art, after perusal of the present application, would understand the concept of "dedicated track." Indeed, if the admission had been made – and it had not – it would be of no consequence because the rejection in issue here was entered for anticipation under 35 U.S.C. § 102. If a single prior art reference, such as Carey here, does not expressly or inherently disclose all of the limitations in a claim, the claim is not anticipated by the reference, regardless of what is well-known in the art.

Even assuming that Carey's "series of dedicated connections" is the same as "dedicated tracks," Carey does not teach that "each station has a dedicated track which it can use to send information to other stations." For example, Carey does not teach that each station (of some plurality of stations) has a dedicated track. As another example, Carey does not teach that the dedicated track of a particular station is used to send information from the particular station, rather than receive information at the particular station. Moreover, Carey does not teach that the dedicated track of a particular station connects the particular station to other stations, rather than to a single other station. In Carey, we simply cannot tell (1) to what the connections are dedicated, (2) whether they are dedicated input or output connections, and (3) whether the dedicated connections are one-to-one, one-to-many, or many-to-one connections. In contrast, each of the pending independent claims expressly recites that (1) there are a plurality of stations, each with a dedicated track; (2) each station with a dedicated track can use the dedicated track to send information, and (3) each station can use the dedicated track to send information to stations, *i.e.*, to a plurality of stations.

To anticipate a claim, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) (*quoted with approval in* MPEP § 2131). Even assuming that "dedicated connections" are the same as "dedicated tracks," Carey fails to teach the remaining limitations of the "wherein" clauses of the independent claims. Without such teaching, Carey cannot anticipate independent claims 1, 19, and 38.

Claims 4 and 40

We have also previously argued that each station of claim 4 includes an arbiter that evaluates requests from other stations and selects a track on which to receive incoming data, while according Carey's disclosure arbitration between or among requests is performed by central control logic. The Final Office Action responds, at page 8, that while Carey's "arbitration is centrally located," the arbiter makes arbitration decisions based on target availability. The Final Office Action concludes that "[f]rom this disclosure it can be determined that if the target is available for arbitration, then arbitration is done." We understand this to mean that the Final Office Action equates target inputs to the central arbiter to be the same as arbiters at each of the stations. An arbiter, however, is more than an input or output. It is a circuit that actually performs the arbitration function. Specifically, claim 4 recites "an arbiter that evaluates requests . . . and selects a track." This is not a mere input to some central logic that performs arbitration according to Carey.

Carey teaches a single, centrally located arbiter 38. *E.g.*, Carey, col. 13, line 1; *id.*, Figure 2. Even if the arbiter 38 could have distributed architecture, Carey does not disclose such architecture, at least Carey does not disclose more than receiving information regarding target availability from the targets. A single central arbiter is not necessarily transformed into a plurality of distributed arbiters by the mere fact that it receives multiple inputs regarding availability of targets. A hypothetical circuit that performs some function is not necessarily transformed into a plurality of circuits simply because the circuit has a plurality of inputs. According to claim 4, each station includes an arbiter. Carey does not anticipate claim 4 because it discloses a single, central arbiter, instead of an arbiter at each of a plurality of stations.

Dependent claim 40 recites that each station includes an arbiter circuit. This claim is not anticipated by Carey for the reasons discussed above in relation to claim 4. Moreover, this claim expressly recites an arbiter circuit at each station. Even assuming that Carey discloses an input or connection from the target to the central arbiter, a “circuit” is more than a mere input or connection.

Claims 15 and 34

Claims 15 and 34 recite more than one component of the plurality of on-chip components being coupled to the on-chip communication bus through one of the stations. The present application defines the term “component” as follows:

Component: A subset of circuits on a chip that perform a particular function or operation. Examples include, but are not limited to, a PCI (peripheral component interconnect) bridge, a USB (universal serial bus) interface, an I2C (inter-integrated-circuit) interface, a UART (universal asynchronous receiver transmitter) interface, a DDR (data direction register) and/or SDRAM (synchronous dynamic access memory), an ethernet interface, a general I/O (input/output) interface, and other circuits and interfaces. Components also can be referred to as peripherals.

Application, page 7, line 23, through page 8, line 5. This express definition of the term “component” should be applied to the construction of claims 15 and 34. Therefore, a component, as recited in these claims, is a functional or operational component. It is not merely an addressable location. Carey does not teach multiple functional/operational components coupled to the bus through one station. For this reason, claims 15 and 34 are believed to be separately patentable over Carey.

Moreover, the Final Office Action applies an incorrect legal standard to determining whether Carey anticipates claims 15 and 34. The Final Office Action purports “[t]o determine whether Carey discloses some equivalent” of the limitation in claims 15 and 34. Final Office Action, page 9, lines 9-10 (underlining added for emphasis). Equivalence should not be considered in determining anticipation under section 102. The issue should be whether Carey discloses the “identical invention . . . in as complete detail as is contained in the . . . claim.” *Richardson, supra*, 868 F.2d 1236, 9 U.S.P.Q.2d 1920.

Finally, we propose to amend claim 15, so that the amended claim will recite specific “components.” Support for the proposed amendment can be found in the present application, at page 7, line 23, through page 8, line 5, which text is quoted above. Carey does not teach coupling through one station of multiple components listed in the amended claim 15.


The above discussion addresses patentability of all independent claims and of several dependent claims of the application. As regards the dependent claims not specifically discussed, these claims are patentable together with their base claims and intervening claims, if any.

CONCLUSION

For the foregoing reasons, Applicants respectfully submit that all pending claims are patentable over references of record. To discuss any matter pertaining to the present application, the Examiner is invited to call the undersigned attorney at (858) 720-9431.

Having made an effort to bring the application in condition for allowance, a timely notice to this effect is earnestly solicited.

Respectfully submitted,


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